CLAIMS

1-18 (Canceled)

19. (Currently amended) A method for recording and reviewing actions performed during development of software content created using a tool on a computer system having a processor and memory, said method comprising:

> receiving ~~one or more~~ user events during the development of the software content, wherein each of the user events is a low-level event generated by a peripheral device coupled to the computer system;

> determining, automatically by the computer system in response to receiving the ~~one or more~~ user events, which events and sequences of events constitute actions, wherein each determined action corresponds to a change in the software content and wherein at least one of the user events, by itself, does not correspond to a change in the software content;

> determining, by the computer system, whether an explanation accompanies an action;

> recording the determined actions during the development of the software content if a user preference specifies that the determined actions are to be recorded; and

> recording the determined explanations such that a recorded explanation of a recorded action is associated with the recorded action.

20. (Previously presented) A method as defined in claim 19, said method further comprising:

> receiving a user request for playback of recorded actions;

> accessing recorded actions and associated recorded explanations; and

playing back recorded actions and any associated recorded explanations.

21. (Previously presented) A method as defined in claim 19, wherein said
determining whether as explanation accompanies an action includes prompting
a user for an explanation with respect to an action being recorded.

22. (Canceled)

23. (Currently amended) A computer-readable storage medium having stored
thereon instructions for causing a computer to perform the following method
comprising:

    displaying a starting state of multimedia content;

    determining automatically, by the computer, which recorded actions
        satisfy a specified criteria, wherein each recorded action
        corresponds to at least one user events and wherein each recorded
        action corresponds to a change in the multimedia content and
        wherein at least one of the at least one user events, by itself, does
        not correspond to a change in the multimedia content;

    identifying automatically, by the computer, a plurality of redundant
        determined recorded actions;

    summarizing automatically, by the computer, the plurality of redundant
        determined recorded actions to generate a summarized determined
        recorded action;

    replacing automatically, by the computer, the plurality of redundant
        determined recorded actions with the summarized determined
        recorded action; and

playing back a sequence of only those determined recorded actions in

    chronological order on an output device during a development of

    content.

24. (Currently amended) A computer-readable storage medium having stored

thereon instructions for causing a computer to perform a method comprising:

    receiving a user event during a development of content;

    determining whether said received user event indicates a playback

        request; and

    if said received user event indicates a playback request, then

        determining automatically, by the computer, which recorded

            actions to play back by determining which recorded actions

            meet a specified criteria, <u>wherein each recorded action</u>

            <u>corresponds to at least one user events and wherein each</u>

            <u>recorded action corresponds to a change in the content and</u>

            <u>wherein at least one of the at least one user events, by itself,</u>

            <u>does not correspond to a change in the content</u>,

        identifying automatically, by the computer, a plurality of

            redundant determined recorded actions,

        summarizing automatically, by the computer, the plurality of

            redundant determined recorded actions to generate a

            summarized determined recorded action,

        replacing automatically by the computer, the plurality of

            redundant determined recorded actions with the

            summarized determined recorded action and

        playing back those determined recorded actions and

if said received user event does not indicate a playback request,

then determining whether there is an action to record and

recording the action if it is determined that there is an action

to record during the development of the content.

25. (Currently amended) A computer-readable storage medium having stored

thereon instructions for causing a computer to perform the following method

comprising:

receiving a user event during a development of content;

determining whether said received user event indicates a playback

request; and

if said received user event indicates a playback request, then

determining automatically, by the computer, which recorded

actions to play back by determining which recorded actions

meet a specified fixed criteria, said fixed criteria being

selectable from a plurality of fixed criteria, wherein each

recorded action corresponds to at least one user events and

wherein each recorded action corresponds to a change in the

content and wherein at least one of the at least one user

events, by itself, does not correspond to a change in the

content,

identifying automatically, by the computer, a plurality of

redundant determined recorded actions,

summarizing automatically, by the computer, the plurality of

redundant determined recorded actions to generate a

summarized determined recorded action,

replacing automatically, by the computer, the plurality of

redundant determined recorded actions with the

summarized determined recorded action and

playing back those determined recorded actions and

if said received user event does not indicate a playback request,

then determining whether there is an action to record and

recording the action if it is determined that there is an action

to record during the development of the content.

26. (Currently amended) A computer-readable storage medium having stored
thereon executable computer program instructions, the executable computer
program instructions including an action class list and, when executed by a
digital processing system, causing the system to perform a method for playback
of actions from the action class list, wherein:

the action class list comprises a plurality of action class description fields,

each action class description field having a first field containing

data which specifies a particular action class and a second field

containing data which specifies a generic explanation of the action

class specified in the corresponding first field,

wherein the action class list is used during playback of actions, during a

development of content,

to identify, automatically, by the digital processing system, a

plurality of redundant actions, wherein each action

corresponds to at least one user events and wherein each

recorded action corresponds to a change in the content and

wherein at least one of the at least one user events, by itself,

does not correspond to a change in the content,

to summarize, automatically, by the digital processing system, the

plurality of redundant actions to generate a summarized

action,

to replace automatically, by the digital processing system the

plurality of redundant actions with a summarized action

and

to determine an explanation associated with the action class of each

of the actions and to accompany the played back actions

with the determined explanations.

27.   (Previously Presented) A computer-readable storage medium as defined

in claim 26 wherein said second field identifies a software routine capable of

producing an explanation based upon properties of a recorded action.

28. (Currently amended) A method for playing back actions recorded during

development of content created using a tool on a computer system having a

processor, memory and an output device, the tool having a user-selectable

playback initiating mechanism for initiating the playback, said method

comprising:

displaying a starting state of the content; and

playing back recorded actions, during the development of the content, in

chronological order on said output device, an action from said

recorded actions comprising a sequence of ~~at least one~~ events,

wherein said ~~at least one~~ events [[is]] are selected to constitute said

action based on a preset criterion and wherein each action

corresponds to a change in the content and wherein at least one of

the events, by itself, does not correspond to a change in the content,

wherein a plurality of redundant actions are automatically replaced

by the computer system with a summarized action and wherein the

summarized action is played back instead of the plurality of

redundant actions and wherein the summarized action is generated

automatically by the computer system.

29. (Previously presented) The method of claim 28, wherein:

at least one action from said recorded actions is accompanied by an

explanation and said playing back further comprises playing back

any associated recorded explanations along with recorded actions.

30. (Currently amended) A computer-readable storage medium having stored

thereon instructions for causing a computer to perform the following method

comprising:

displaying a starting state of content;

playing back recorded actions, during the development of the content, in

chronological order on said output device, an action from said

recorded actions comprising a sequence of at least one events,

wherein said at least one events [[is]] are selected to constitute said

action based on a preset criterion and wherein each action

corresponds to a change in the content and wherein at least one of

the events, by itself, does not correspond to a change in the content,

wherein a plurality of redundant actions are automatically replaced

by the computer system with a summarized action and wherein the

summarized action is played back instead of the plurality of

redundant actions and wherein the summarized action is generated

automatically by the computer system.

31. (Previously Presented) The computer-readable storage medium of claim 30,
wherein:

> at least one action from said recorded actions is accompanied by an
> > explanation and said playing back further comprises playing back
> > any associated recorded explanations along with recorded actions.

32. (Currently amended) An apparatus for playing back actions performed
during development of content created using a multimedia creation tool on a
computer system having a processor and memory, said apparatus comprising:

> a user interface means for receiving user events, during the development
> > of the content, receiving user requests for playback of actions and
> > displaying recorded actions; and

> a playback module coupled to said user interface module for receiving
> > user request for playback of recorded actions and for displaying
> > playback of recorded actions, an action from said recorded actions
> > comprising a sequence of at least one events, wherein said at least
> > one events [[is]] are selected to constitute said action based on a
> > preset criterion and wherein each action corresponds to a change in
> > the content and wherein at least one of the events, by itself, does
> > not correspond to a change in the content, wherein a plurality of
> > redundant actions is automatically replaced by the computer
> > system with a summarized action and wherein the summarized
> > action is played back instead of the plurality of redundant actions,
> > said playback in response to such a user request playing back
> > recorded actions and wherein the summarized action is generated
> > automatically by the computer system.

33. (Previously presented) The apparatus of claim 32, wherein:

> at least one action from said recorded actions is accompanied by an
>
>> explanation and said playing back further comprises playing back
>>
>> any associated recorded explanations along with recorded actions.

34. (Previously presented) The apparatus of claim 32, wherein:

> said playback is based on determining automatically which recorded
>
>> actions satisfy a specified arbitrary criteria.

35. (Currently amended) A method for recording and reviewing actions performed during development of content created using a tool on a computer system having a processor and memory, said method comprising:

> receiving user events, during the development of the content;
>
> determining, automatically by the computer system in response to
>
>> receiving the user events, which events and sequences of events
>>
>> constitute actions; and
>
> recording the determined actions rather than recording the individual
>
>> events constituting those actions, during the development of the
>>
>> content if a user preference specifies that the determined actions are
>>
>> to be recorded, wherein each action corresponds to a change in the
>>
>> content and wherein at least one of the events constituting an
>>
>> action, by itself, does not correspond to a change in the content.

36. (Currently amended) A computer-readable storage medium having stored thereon instructions for causing a computer to perform the following method comprising:

receiving user events, during a development of content;

determining, automatically by the computer in response to receiving the

user events, which events and sequences of events constitute

actions; and

recording the determined actions rather than recording the individual

events constituting those actions, during the development of the

content if a user preference specifies that the determined actions are

to be recorded, wherein each action corresponds to a change in the

content and wherein at least one of the events constituting an

action, by itself, does not correspond to a change in the content.

37. (Previously Presented) The computer-readable storage medium of claim 36,

wherein the operations further comprise:

determining whether an explanation accompanies an action; and

recording the determined explanations such that a recorded explanation

of a recorded action is associated with the recorded action if a user

preference specifies that the action is to be recorded.

38. (Previously Presented) The computer-readable storage medium of claim 36,

wherein:

said determining comprises determining which events and sequences of

events constitute actions by applying one of a plurality of

granularities, said one of a plurality of granularities being selected

based on criteria, whereby said applied one of a plurality of

granularities varies depending on the criteria.

39. (Currently amended) An apparatus for recording and reviewing actions performed during development of content created using a tool on a computer system having a processor and memory, said apparatus comprising:

> a user interface means for receiving user events which occur during development of content; and

> a recorder module comprising hardware coupled to receive user events from said user interface means, said recorder module determining automatically in response to receiving the user events which events and sequences of events constitute actions and recording those actions, if a user preference specifies that those actions are to be recorded, said recorder module capable of recording an explanation for each individual action, said explanations being recorded in a manner which associates a recorded explanation of a recorded action with the recorded action, wherein each action corresponds to a change in the content and wherein at least one of the events constituting an action, by itself, does not correspond to a change in the content.

40. (Previously Presented) The computer-readable storage medium of claim 23, wherein the specified criteria is a user specified criteria.

41. (Previously Presented) The computer-readable storage medium of claim 24, wherein the specified criteria is a user specified criteria.

42. (Previously Presented) The computer-readable storage medium of claim 25, wherein the specified fixed criteria is a user specified fixed criteria.

43. (Previously Presented) The method of claim 28, wherein the preset criterion is
    a user specified preset criterion.

44. (Previously Presented) The computer-readable storage medium of claim 30,
    wherein the preset criterion is a user specified preset criterion.

45. (Previously Presented) The apparatus of claim 32, wherein the preset
    criterion is a user specified preset criterion.

46. (Previously Presented) The computer-readable storage medium of claim 38,
    wherein the criteria is a user specified criteria.

47 - 57. (Canceled)

58. (New) A computer-readable storage medium which stores instructions that,
    when executed by a system, cause the system to perform a method as in
    claim 19.